



State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095

(603) 271-3406 FAX (603) 271-7894



January 8, 2003
Letter of Deficiency
DAM #165.06

Mr. Chris Countie
Pennichuck Water Works, Inc.
4 Water Street
P.O. Box 448
Nashua, NH 03061

RE: Supply Pond Dam, Nashua

Dear Mr. Countie:

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that play a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 502.02, an inspection of the subject dam was conducted on October 10, 2002. During this visual inspection and/or file review, the following deficiencies were observed:

- There is brush in the discharge channel between the dam and the downstream culverts;
- There is leakage through the downstream stone face of the dam at both the left and right abutments;
- 3. There is cracked and spalling concrete along the entire length of the walkway above the spillway;
- 4. There is brush growth on the left upstream concrete wall at the left end of the walkway;
- 5. There is deteriorated concrete on the upstream face of the spillway concrete piers.
- 6. The right upstream concrete and stone masonry wall is in initial stages of failure. The wall is located to the right of the spillway;
- 7. There is seepage along the right downstream bank of the discharge channel between the dam and the downstream culvert;
- 8. The Emergency Action Plan (EAP) has not been updated or tested annually; and
- 9. The operation and maintenance plan (O&M) needs to be updated.

DES is aware that Pennichuck Water Works is currently working with an engineering consultant to correct the below listed deficiencies and is looking forward to working with Pennichuck and consultants through the permitting and construction process.

- Remove the brush from the discharge channel between the dam and the culverts;
2. Investigate and repair the leakage through the downstream stone face of the dam;
 3. Investigate and repair, if necessary, the walkway above the spillway;
 4. Remove the brush on the left upstream concrete wall at the left end of the spillway;
 5. Investigate and repair the deteriorated concrete piers associated with the spillway;
 6. Investigate and repair the right upstream concrete and stone masonry wall
 7. Investigate and repair the seepage along the right downstream bank between the dam and the downstream culverts;
 8. Test and update the EAP. Please contact Bethann McCarthy at 271-4167 before updating your EAP, for assistance in determining what changes are necessary; and
 9. Update the names and phone numbers on the O&M plan.

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. We have enclosed a self addressed stamped envelope for you to return this form.

Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at the address listed on the top of the previous page.

Sincerely,

COPY
Jeffrey M. Blaney
Dam Safety Engineer

Attachments Copy of O&M on file, DB8, DB13

cc: Gretchen Rule

Bethann McCarthy, P.E., EAP Coordinator
City of Nashua

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